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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.				
10/662,987	09/15/2003	Shimon Marom	246/03735	2244				
44909 PRTSI P.O. Box 16446 Arlington, VA 22215	7590 01/10/2008		<table border="1"><tr><td colspan="2">EXAMINER</td></tr><tr><td colspan="2">STARKS, WILBERT L</td></tr></table>		EXAMINER		STARKS, WILBERT L	
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01/10/2008	PAPER							

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/662,987

Applicant(s)

MAROM ET AL.

Examiner

Wilbert L. Starks, Jr.

Art Unit

2129

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-67 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-5, 7, 10, 11, 13, 17, 19-23, 25-28, 31 and 34-66 is/are allowed.
- 6) ☒ Claim(s) 1, 6, 8, 9, 12, 14-16, 18, 24, 29, 30, 32, 33 and 67 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 U.S.C. §102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 6, 8, 9, 12, 14-16, 18, 24, 29, 30, 32, 33, and 67 are rejected under 35 U.S.C. 102(e) as being anticipated by Garcia, et al. (U.S. Patent Number 6,843,158 B2; dated 18 JAN 2005; class 89; subclass 1.13).

### Claim 1

Claim 1's "applying a cycle comprising:" is anticipated by Garcia, et al., column 13, lines 17-52, where it recites:

Essentially, the rats brains are conditioned to associate the olfactory detection of "bomb-related nitrates" with the substance that when eaten (or otherwise self administered) will satisfy of their addiction cravings. To achieve this, the highly addictive substance is first introduced to the rats (in the lab setting) coupled with food and the target scent. For example, the animals feeding receptacle can be outfitted with a small perforated container which contains the target scent. The food is mixed with or is made solely of the odorless addictive drug. After a few sessions with

food, drug, and target scent all coupled together, the animal is presented with the same foodstuff minus the drug, or, the presence of the scent. Then, the animal is re-presented with all three components again. In this way, it learns to associate the drug with the scent, and not anything else. After a **few sessions**, the animal can be presented with two food vessels, A and B, each fitted with an identical-appearing perforated container, located close to where the animal stands to feed. Vessel A's perforated container contains the target scent, and Vessel B is empty. The food in Vessel A contains the odorless drug (pellet, liquid, etc), while the food in Vessel B is free of drug. The animal has been successfully cross conditioned to the drug/target scent when it feeds only, and always, from the scent/drug containing vessel (Vessel A), without ever having to sample the food in the drug-free Vessel B. In this way, the rats drive to locate the target scent is equated to and reflects its drive to satisfy its drug cravings. Alternately, the development of the rats could be coupled with manipulation of certain genetic traits, and the training of the animals could be enhanced by genetic engineering. In other words, once certain animal behaviors can be isolated and studied, the development of rats which are genetically more suited to tolerate the presence of nitrates, or have some predisposition to addiction to nitrate substances, could be used in conjunction with the training of rats for the purpose in question.

Claim 1's "stimulating a neural network by said controller applying at least an input signal to the network;" is anticipated by Garcia, et al., column 2, lines 50-67, where it recites:

According to one aspect of the invention, there is provided a method for detecting the presence and location of a target object comprising the steps of **training a live animal in a controlled environment to respond to certain characteristics associated with the target object**; rewarding the animal when the characteristic associated with the target object has been sensed; and releasing the animal into an area to detect the presence of such target objects in said area by sensing said characteristics associated with the target object. The "reward" to the animal for having located the given target may be a substance to which it becomes addicted, and this addiction in turn reinforces both the animals drive to locate its target, as well as its developing expertise in doing so in an effective, efficient, discriminating manner. The reward is always associated with the presence of the target, and in this way, the target is equated with satisfying reward cravings in the animal.

Claim 1's "detecting an output response of the network by said controller; and" is anticipated by Garcia, et al., Abstract, where it recites:

The present invention relates generally to a method and devices for the detection of target objects, such as landmines, using the odor characteristics which may be associated with the target objects as a way of detecting their presence. The invention includes devices used to carry out a method of training live animals, such as rats, to seek out the target objects in the field, or to localize, unearth, and mark the location thereof.

Claim 1's "modifying said stimulation by said controller for at least a period of time if said response matches a desired at least approximate response; and" is anticipated by Garcia, et al., column 13, lines 63-67 and column 14, lines 1-24, where it recites:

Once the rats locate a landmine (based on the detected odor of nitrate vapors or other explosive compounds), they will search for the addictive drug that they have come to associate with finding an object that looks like a landmine, and which possesses the characteristic target smell (e.g. nitrates). In the controlled training setting, the rats would have been led to the location of the buried (or hidden) dummy landmine based on the target scent emanating from the scent containing perforated container (FIG. 8: 204, 206; FIG. 7: 192,194; FIG. 9: 214,216). This perforated container, located on top of the dummy landmine, on its underside, or on the side (see FIGS. 2, 3, 7, 8 and 9) can be packed with a piece of cotton impregnated with the target scent chemicals (or material). In the controlled setting, the rats will be conditioned to expect the drug containing perforated containers to reside either anywhere on the body of the dummy landmine (resulting in an aggressive search each time), or, always on top (leading the rat to only unearth the top aspect of the mine) etc. In other words, the rat will perform a physical search of the mine it finds that mimics the extent and "aggressiveness" of they way it was conditioned to search the dummy landmines in the controlled training setting. If the operator wants the rat to totally unearth the (real) mines it finds, it will accustom the rat to expect the drug containing perforated container to be literally anywhere. If he/she wants the rat to tread lightly on or near the mine, he will locate the drugs always in the same spot, use negative conditioning, and/or offer the rat a means of receiving its reward without disturbing the mine site.

Claim 1's "repeating said cycle of stimulation, detection and modification at least one more time until said neural network is trained to generate a desired output response for said input signal." is anticipated by Garcia, et al., column 13, lines 17-52, where it recites:

Essentially, the rats brains are conditioned to associate the olfactory detection of "bomb-related nitrates" with the substance that when eaten (or otherwise self administered) will satisfy of their addiction cravings. To achieve this, the highly addictive substance is first introduced to the rats (in the lab setting) coupled with food and the target scent. For example, the animals feeding receptacle can be outfitted with a small perforated container which contains the target scent. The food is mixed with or is made solely of the odorless addictive drug. After a few sessions with food, drug, and target scent all coupled together, the animal is presented with the same foodstuff minus the drug, or, the presence of the scent. Then, the animal is re-presented with all three components again. In this way, it learns to associate the drug with the scent, and not anything else. After a few sessions, the animal can be presented with two food vessels, A and B, each fitted with an identical-appearing perforated container, located close to where the animal stands to feed. Vessel A's perforated container contains the target scent, and Vessel B is empty. The food in Vessel A contains the odorless drug (pellet, liquid, etc), while the food in Vessel B is free of drug. The animal has been successfully cross conditioned to the drug/target scent when it feeds only, and always, from the scent/drug containing vessel (Vessel A), without ever having to sample the food in the drug-free Vessel B. In this way, the rats drive to locate the target scent is equated to and reflects its drive to satisfy its drug cravings. Alternately, the development of the rats could be coupled with manipulation of certain genetic traits, and the training of the animals could be enhanced by genetic engineering. In other words, once certain animal behaviors can be isolated and studied, the development of rats which are genetically more suited to tolerate the presence of nitrates, or have some predisposition to addiction to nitrate substances, could be used in conjunction with the training of rats for the purpose in question.

**Claim 6**

Claim 6's "A method according to claim 1, wherein said modifying comprises modifying said input signal." is anticipated by Garcia, et al., column 12, lines 40-50, where it recites:

A landmine of the type illustrated in FIG. 7 may be used, for example, where a rat is to be conditioned to localize, but not completely unearth the landmine, and not to dig the mine out and flip it over in search of addictive drug pellets. Further, as an additional embodiment, the landmine shown in FIG. 7 may contain a switch which, when the landmine is flipped over, causes delivery of a noxious stimulus, such as a shock or contamination of the drug pellet with a bitter liquid or bitter taste to condition the animal from digging up the landmine.

### **Claim 8**

Claim 8's "A method according to claim 1, wherein said modifying is applied in a manner known to affect a stability of connections in said network." is anticipated by Garcia, et al., column 1, lines 56-67 column 2, lines 1-16, where it recites:

For instance, whereas dogs have proven to be highly effective detection agents, each dog can cost over \$50,000 to train, and to continue to be effective in the face of changing mine modalities, each dog requires regular skills maintenance and additional training. Furthermore, other factors besides their high cost are equally discouraging. These include the following: (1) trained dogs are occasionally casualties themselves because over time a significant percentage of these animals die as casualties in the field; (2) the long-term use of trained dogs is not possible because although dogs can be well-trained based only on praise and affection from their human trainers and masters, these "reenforcers" prove to wane in strength over time, resulting in the inevitable increase in the level of risk to the training personnel; (3) the use of trained dogs depends heavily on the presence and interaction with a trained human de-miner which still imposes a great element of risk to human life; (4) the training is "task" specific because dogs only learn how to locate landmines, and once they have located them, training dogs to avoid detonating a landmine is extremely difficult, leading to frequent inadvertent detonation of mines by activation of booby-trap mechanisms; (5) as dogs are limited to only localizing mines, the two problems of unearthing and disposing of the localized mines remain; and (6) dogs

only provide guidance and information as to the location of a landmine in a relatively large general area, ineffective for safe pin-point detection of landmines for human clearers.

### **Claim 9**

Claim 9's "A method according to claim 1, wherein said modifying is applied in a manner known to affect a learning behavior of said neurons of said network." is anticipated by Garcia, et al., column 1, lines 56-67 column 2, lines 1-16, where it recites:

For instance, whereas dogs have proven to be highly effective detection agents, each dog can cost over \$50,000 to train, and to continue to be effective in the face of changing mine modalities, each dog requires regular skills maintenance and additional training. Furthermore, other factors besides their high cost are equally discouraging. These include the following: (1) trained dogs are occasionally casualties themselves because over time a significant percentage of these animals die as casualties in the field; (2) the long-term use of trained dogs is not possible because although dogs can be well-trained based only on praise and affection from their human trainers and masters, these "reenforcers" prove to wane in strength over time, resulting in the inevitable increase in the level of risk to the training personnel; (3) the use of trained dogs depends heavily on the presence and interaction with a trained human de-miner which still imposes a great element of risk to human life; (4) the training is "task" specific because dogs only **learn** how to locate landmines, and once they have located them, training dogs to avoid detonating a landmine is extremely difficult, leading to frequent inadvertent detonation of mines by activation of booby-trap mechanisms; (5) as dogs are limited to only localizing mines, the two problems of unearthing and disposing of the localized mines remain; and (6) dogs only provide guidance and information as to the location of a landmine in a relatively large general area, ineffective for safe pin-point detection of landmines for human clearers.

### **Claim 12**

Claim 12's "A method according to claim 1, wherein said modifying comprises applying a chemical agent." is anticipated by Garcia, et al., column 12, lines 40-50, where it recites:



A landmine of the type illustrated in FIG. 7 may be used, for example, where a rat is to be conditioned to localize, but not completely unearth the landmine, and not to dig the mine out and flip it over in search of addictive drug pellets. Further, as an additional embodiment, the landmine shown in FIG. 7 may contain a switch which, when the landmine is flipped over, causes delivery of a noxious stimulus, such as a shock or contamination of the drug pellet with a bitter liquid or bitter taste to condition the animal from digging up the landmine.

#### **Claim 14**

Claim 14's "A method according to claim 1, comprising modifying said method by said controller in response to a response of said network to said method." is anticipated by Garcia, et al., column 12, lines 40-50, where it recites:

A landmine of the type illustrated in FIG. 7 may be used, for example, where a rat is to be conditioned to localize, but not completely unearth the landmine, and not to dig the mine out and flip it over in search of addictive drug pellets. Further, as an additional embodiment, the landmine shown in FIG. 7 may contain a switch which, when the landmine is flipped over, causes delivery of a noxious stimulus, such as a shock or contamination of the drug pellet with a bitter liquid or bitter taste to condition the animal from digging up the landmine.

#### **Claim 15**

Claim 15's "A method according to claim 1, wherein said desired output response is a particular defined response." is anticipated by Garcia, et al., column 2, lines 50-67, where it recites:

According to one aspect of the invention, there is provided a method for detecting the presence and location of a target object comprising the steps of training a live animal in a controlled environment to respond to certain characteristics associated with the target object; rewarding the animal when the characteristic associated with the target object has

been sensed; and releasing the animal into an area to detect the presence of such target objects in said area by sensing said characteristics associated with the target object. The "reward" to the animal for having located the given target may be a substance to which it becomes addicted, and this addiction in turn reinforces both the animals drive to locate its target, as well as its developing expertise in doing so in an effective, efficient, discriminating manner. The reward is always associated with the presence of the target, and in this way, the target is equated with satisfying reward cravings in the animal.

### **Claim 16**

Claim 16's "A method according to claim 1, wherein said desired output response is a random response pattern indicative of an unlearning by said network." is anticipated by Garcia, et al., column 12, lines 40-50, where it recites:

A landmine of the type illustrated in FIG. 7 may be used, for example, where a rat is to be conditioned to localize, but not completely unearth the landmine, and not to dig the mine out and flip it over in search of addictive drug pellets. Further, as an additional embodiment, the landmine shown in FIG. 7 may contain a switch which, when the landmine is flipped over, causes delivery of a noxious stimulus, such as a shock or contamination of the drug pellet with a bitter liquid or bitter taste to condition the animal from digging up the landmine.

### **Claim 18**

Claim 18's "A method according to claim 1, comprising changing said Input pattern during a repetition cycle." is anticipated by Garcia, et al., column 12, lines 40-50, where it recites:

A landmine of the type illustrated in FIG. 7 may be used, for example, where a rat is to be conditioned to localize, but not completely unearth the landmine, and not to dig the mine out and flip it over in search of addictive drug pellets. Further, as an additional embodiment, the landmine shown in FIG. 7 may contain a switch which, when the landmine is flipped over, causes delivery of a noxious stimulus, such as

a shock or contamination of the drug pellet with a bitter liquid or bitter taste to condition the animal from digging up the landmine.

#### **Claim 24**

Claim 24's "A method according to claim 1, comprising training a desired output response pattern to inputs as a whole into said network." is anticipated by Garcia, et al., column 2, lines 50-67, where it recites:

According to one aspect of the invention, there is provided a method for detecting the presence and location of a target object comprising the steps of training a live animal in a controlled environment to respond to certain characteristics associated with the target object; rewarding the animal when the characteristic associated with the target object has been sensed; and releasing the animal into an area to detect the presence of such target objects in said area by sensing said characteristics associated with the target object. The "reward" to the animal for having located the given target may be a substance to which it becomes addicted, and this addiction in turn reinforces both the animals drive to locate its target, as well as its developing expertise in doing so in an effective, efficient, discriminating manner. The reward is always associated with the presence of the target, and in this way, the target is equated with satisfying reward cravings in the animal.

#### **Claim 29**

Claim 29's "A method according to claim 1, wherein said network is an in-vivo network in a living non-human animal." is anticipated by Garcia, et al., column 2, lines 50-67, where it recites:

According to one aspect of the invention, there is provided a method for detecting the presence and location of a target object comprising the steps of training a live animal in a controlled environment to respond to certain characteristics associated with the target object; rewarding the animal when the characteristic associated with the target object has been sensed; and releasing the animal into an area to detect the presence of such target objects in said area by sensing said

characteristics associated with the target object. The "reward" to the animal for having located the given target may be a substance to which it becomes addicted, and this addiction in turn reinforces both the animals drive to locate its target, as well as its developing expertise in doing so in an effective, efficient, discriminating manner. The reward is always associated with the presence of the target, and in this way, the target is equated with satisfying reward cravings in the animal.

### **Claim 30**

Claim 30's "providing a potential environmental contaminant;" is anticipated by Garcia, et al., column 2, lines 50-67, where it recites:

According to one aspect of the invention, there is provided a method for detecting the presence and location of a target object comprising the steps of training a live animal in a controlled environment to respond to certain characteristics associated with the target object; rewarding the animal when the characteristic associated with the target object has been sensed; and releasing the animal into an area to detect the presence of such target objects in said area by sensing said characteristics associated with the target object. The "reward" to the animal for having located the given target may be a substance to which it becomes addicted, and this addiction in turn reinforces both the animals drive to locate its target, as well as its developing expertise in doing so in an effective, efficient, discriminating manner. The reward is always associated with the presence of the target, and in this way, the target is equated with satisfying reward cravings in the animal.

Claim 30's "repeating said method under at least two conditions of said contaminant; and" is anticipated by Garcia, et al., column 13, lines 17-52, where it recites:

Essentially, the rats brains are conditioned to associate the olfactory detection of "bomb-related nitrates" with the substance that when eaten (or otherwise self administered) will satisfy of their addiction cravings. To achieve this, the highly addictive substance is first introduced to the rats (in the lab setting) coupled with food and the target scent. For example, the animals feeding receptacle can be outfitted with a small perforated container which contains the target scent. The food is mixed with or is

made solely of the odorless addictive drug. After a few sessions with food, drug, and target scent all coupled together, the animal is presented with the same foodstuff minus the drug, or, the presence of the scent. Then, the animal is re-presented with all three components again. In this way, it learns to associate the drug with the scent, and not anything else. After a few sessions, the animal can be presented with two food vessels, A and B, each fitted with an identical-appearing perforated container, located close to where the animal stands to feed. Vessel A's perforated container contains the target scent, and Vessel B is empty. The food in Vessel A contains the odorless drug (pellet, liquid, etc), while the food in Vessel B is free of drug. The animal has been successfully cross conditioned to the drug/target scent when it feeds only, and always, from the scent/drug containing vessel (Vessel A), without ever having to sample the food in the drug-free Vessel B. In this way, the rats drive to locate the target scent is equated to and reflects its drive to satisfy its drug cravings. Alternately, the development of the rats could be coupled with manipulation of certain genetic traits, and the training of the animals could be enhanced by genetic engineering. In other words, once certain animal behaviors can be isolated and studied, the development of rats which are genetically more suited to tolerate the presence of nitrates, or have some predisposition to addiction to nitrate substances, could be used in conjunction with the training of rats for the purpose in question.

Claim 30's "comparing a response of said network to said method to determine an effect of said contaminant on training of said animal." is anticipated by Garcia, et al., column 13, lines 17-52, where it recites:

Essentially, the rats brains are conditioned to associate the olfactory detection of "bomb-related nitrates" with the substance that when eaten (or otherwise self administered) will satisfy of their addiction cravings. To achieve this, the highly addictive substance is first introduced to the rats (in the lab setting) coupled with food and the target scent. For example, the animals feeding receptacle can be outfitted with a small perforated container which contains the target scent. The food is mixed with or is made solely of the odorless addictive drug. After a few sessions with food, drug, and target scent all coupled together, the animal is presented with the same foodstuff minus the drug, or, the presence of the scent. Then, the animal is re-presented with all three components again. In this way, it learns to associate the drug with the scent, and not anything else. After a few sessions, the animal can be presented with two food vessels, A and B, each fitted with an identical-appearing perforated container, located close to where the animal stands to feed. Vessel A's perforated container contains the target scent, and Vessel B is empty. The food in Vessel A contains the odorless drug (pellet, liquid, etc), while

the food in Vessel B is free of drug. The animal has been successfully cross conditioned to the drug/target scent when it feeds only, and always, from the scent/drug containing vessel (Vessel A), without ever having to sample the food in the drug-free Vessel B. In this way, the rats drive to locate the target scent is equated to and reflects its drive to satisfy its drug cravings. Alternately, the development of the rats could be coupled with manipulation of certain genetic traits, and the training of the animals could be enhanced by genetic engineering. In other words, once certain animal behaviors can be isolated and studied, the development of rats which are genetically more suited to tolerate the presence of nitrates, or have some predisposition to addiction to nitrate substances, could be used in conjunction with the training of rats for the purpose in question.

### **Claim 32**

Claim 32's "A method according to claim 29, wherein said input is a command that can be" is anticipated by Garcia, et al., Abstract, where it recites:

The present invention relates generally to a method and devices for the detection of target objects, such as landmines, using the odor characteristics which may be associated with the target objects as a way of detecting their presence. The invention includes devices used to carry out a method of training live animals, such as rats, to seek out the target objects in the field, or to localize, unearth, and **mark the location thereof**.

Claim 32's "sensed by said animal and wherein said desired output is a behavioral response of said animal." is anticipated by Garcia, et al., Abstract, where it recites:

The present invention relates generally to a method and devices for the detection of target objects, such as landmines, using the odor characteristics which may be associated with the target objects as a way of detecting their presence. The invention includes devices used to carry out a method of training live animals, such as rats, to seek out the target objects in the field, or to localize, unearth, and **mark the location thereof**.

**Claim 33**

Claim 33's "A method according to claim 32, wherein said input and said output are interrelated using a complex logic, including at least two logic steps." is anticipated by Garcia, et al., Abstract, where it recites:

The present invention relates generally to a method and devices for the detection of target objects, such as landmines, using the odor characteristics which may be associated with the target objects as a way of detecting their presence. The invention includes devices used to carry out a method of training live animals, such as rats, to seek out the target objects in the field, or to localize, unearth, and **mark the location thereof**.

**Claim 67**

Claim 67's "An animal trained according to the method of claim 29" is anticipated by Garcia, et al., column 2, lines 50-67, where it recites:

According to one aspect of the invention, there is provided a method for detecting the presence and location of a target object comprising the steps of **training a live animal in a controlled environment to respond to certain characteristics associated with the target object**; rewarding the animal when the characteristic associated with the target object has been sensed; and releasing the animal into an area to detect the presence of such target objects in said area by sensing said characteristics associated with the target object. The "reward" to the animal for having located the given target may be a substance to which it becomes addicted, and this addiction in turn reinforces both the animals drive to locate its target, as well as its developing expertise in doing so in an effective, efficient, discriminating manner. The reward is always associated with the presence of the target, and in this way, the target is equated with satisfying reward cravings in the animal.

***Allowable Subject Matter***

3. Claims 2-5, 7, 10-11, 13, 17, 19-23, 25-28, 31, and 34-66 are allowed.

**Conclusion**

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Specifically:

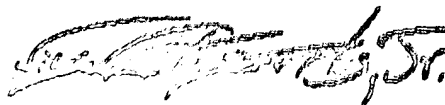
A. Simpson, et al. (U.S. Patent Number 5,648,636; dated 15 JUL 1997; class 102; subclass 355) discloses non-detonable and non-explosive explosive simulators.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Wilbert L. Starks, Jr. whose telephone number is (571) 272-3691.

Alternatively, inquiries may be directed to the following:

S. P. E. David Vincent (571) 272-3080

Official (FAX) (571) 273-8300



Wilbert L. Starks, Jr.  
Primary Examiner  
Art Unit 2129

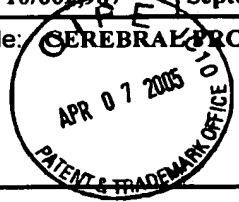
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<b>TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT</b> (Under 37 CFR 1.97(b) or 1.97(c))				Docket No. 246/03735	
In Re Application Of: Shimon MAROM, et al					
Application No. 10/662,987	Filing Date September 15, 2003	Examiner STARKS, W.L.	Customer No. 44909	Group Art Unit 2121	Confirmation No. 2244
Title: CEREBRAL PROGRAMMING					
<div style="text-align: center;">Address to: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450</div> <p style="text-align: center;"><b>37 CFR 1.97(b)</b></p> <p>1. <input checked="" type="checkbox"/> The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application other than a continued prosecution application under 37 CFR 1.53(d); within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; before the mailing of a first Office Action on the merits, or before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.</p> <p style="text-align: center;"><b>37 CFR 1.97(c)</b></p> <p>2. <input type="checkbox"/> The Information Disclosure Statement submitted herewith is being filed after the period specified in 37 CFR 1.97(b), provided that the Information Disclosure Statement is filed before the mailing date of a Final Action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an Action that otherwise closes prosecution in the application, and is accompanied by one of:</p> <p style="padding-left: 40px;"><input type="checkbox"/> the statement specified in 37 CFR 1.97(e);</p> <p style="text-align: center;"><b>OR</b></p> <p style="padding-left: 40px;"><input type="checkbox"/> the fee set forth in 37 CFR 1.17(p).</p>					



**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
(Under 37 CFR 1.97(b) or 1.97(c))

Docket No.  
246/03735

In Re Application: Shimon MAROM, et al

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/662,987	September 15, 2003	STARKS, W.L.	44909	2121	2244

Title: CEREBRAL PROGRAMMING



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(Only complete if Applicant elects to pay the fee set forth in 37 CFR 1.17(p))

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Dated: March 20, 2005

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Maier FENSTER, Reg. No. 41,016

William H. Dippert, Esq.  
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New York, NY 10022-7650

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PTO/SB92 (08-00)

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Applicant: Shimon Marom, et al.

Serial No: 10/662,987

Filing Date: September 15, 2003

For: Cerebral Programming

Enclosures: (1) Transmittal of Information Disclosure Statement (3 pages); (2) Information Disclosure Statement (2 pages); (3) IDS Citation (3 pages); (4) Acknowledgement Postcard.

Burden Hour Statement: This form is estimated to take 0.03 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

246/03735

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In regard to the application of: Shimon Marom

Serial No : 10/662,987

Group Art Unit: 2121

Filed : September 15, 2003

Examiner: STARKS, W.L.

: CEREBRAL PROGRAMMING



**INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicant respectfully directs the attention of the Examiner to art cited with respect to U.S. Application No. 10/662,987, which is a continuation of PCT/IL02/00204.

The Examiner is respectfully requested to review and consider this art, in accordance with MPEP 2001.06 and to indicate in the next office action that he has considered this art. Additionally, the Examiner is respectfully requested to cite those prior art publications mentioned in this application which the Examiner considers to be material or relevant to the present claims.

Further, in order to comply with discretionary regulations 37 CFR 1.97 and 1.98, attached is an Equivalent to Form PTO-1449 listing the cited art. Also attached are copies<sup>1</sup> of the art. This art contains information which the Examiner may consider to be important in deciding whether to allow the present application to issue as a patent.

Copies of items 1-9, 17-22 and 30-33 are not attached, as the USPTO waived the requirement under 37 CFR 1.98(a)(2)(i) for submitting copies of US patents and US patent application publications in all U.S. applications filed after June 30, 2003. See MPEP 609 III. A(2).” Additionally, items 6, 17 and 32 were cited in the international search report.

<sup>1</sup> To the extent that a document is listed and no copy of same is attached, then such document is not at the present time available to the undersigned or is available in the national stage file. If a listed document is not in the English language and an English translation is readily available, such translation is also attached; if translation is not attached, it is not readily available to the undersigned. If a foreign language patent document is cited, and an English language equivalent is known to the undersigned, then such an equivalent patent is also cited on the attached form along with the corresponding foreign language patent and a connecting arrow indicated there between; if no such English language equivalent is cited then none is known to the undersigned.

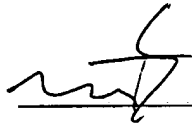
246/03735

In accordance with MPEP Section 609 it is requested that each document cited [including any mentioned in Applicants' specification which is not repeated on the attached (or prior) PTO-1449 form(s) or equivalents thereof] be given thorough consideration and be cited of record in the prosecution history of the present application by initialing on the PTO-1449 form or its equivalent, so that it will appear on the face of the patent issuing on the present application, even if the Examiner does not consider it sufficiently pertinent to use in a rejection, or otherwise does not believe that the guidelines for citation have been fully complied with.

The present Information Disclosure Statement is being submitted in compliance with 37 CFR 1.56 as an Examiner might consider any cited document important in deciding whether to allow the application to issue as a patent, but the citation of each document is not to be construed as an admission that such document is necessarily relevant or prior art. No representation is intended that the cited documents represent the results of a complete search, and it is anticipated that the Examiner in the normal course of examination, will make an independent search and will determine the best prior art consistent with 37 CFR 1.104(a), and in the course of such search will review for relevance every document cited on the attached form.

Early and favorable consideration is earnestly solicited.

Respectfully submitted,  
Shimon MAROM



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March 20, 2005

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